

II. REMARKS

This Amendment is being submitted concurrently with a Request for Continued Examination (RCE). Claims 1, 3-12, 14-19, and 21-24 were previously pending in the present application. Claims 7-8 have been canceled.

Reconsideration of the present application in light of the above amendments and the following remarks is respectfully requested.

Claim Rejections – 35 USC § 102

Claims 21 and 22 were rejected under 35 USC 102(e) as being anticipated by Yang et al. (U.S. Publication No. 2003/0233290, hereinafter referred to as Yang).

Claim 21 requires:

A computer readable medium including computer-readable instructions for tracking and managing a plurality of product and information through a semiconductor manufacturing environment, the computer-readable instructions, comprising:

instructions for establishing a virtual fab with a plurality of entities, each entity associated with an internal process to a semiconductor fab or an external process to the semiconductor fab and wherein at least one of the plurality of entities is associated with an internal process and at least one of the entities is associated with an external process;

instructions for assigning a plurality of event elements for tracking the product through the plurality of entities of the virtual fab, wherein a plurality of event elements are provided for each of the plurality of entities of the virtual fab;

instructions for a communications interface for interacting with a enterprise control entity and the plurality of event elements;

instructions for controlling the product quality, wherein the product quality may be controlled by at least two of the plurality of entities;

instructions for determining a future location for the product and the associated information through the virtual fab via the enterprise control entity; and

instructions for amending the associated information to the recordable medium through the virtual fab. At least both of the elements of claim 21 quoted above are not disclosed by Yang. The Applicants kindly request the Examiner withdraw the rejection. Each element and the contrasting disclosure by Yang is described in turn.

In a previous response, the Applicants argued that Yang did not disclose a plurality of event elements for EACH of the plurality of entities of the virtual fab as required by claim 21. In response, the Examiner states "(1) Examiner respectfully disagrees. See rejection above." Office action dated 10/28 at pg. 21. With respect to the asserted disclosure of the element, the Examiner argues Yang discloses in "[0080, base lot field is a derived number indicator used for tracking the lot for a buyer through all the

suppliers]; see also, ¶ [0136, lot tracking report])” Paragraph [0080] of Yang is reproduced below for ease of reference.

[0080] 1) Base Lot. A derived number indicator used for tracking the lot genealogy for a buyer through all suppliers.

As is clear from inspection of [0080], it provides no indication of event elements. Much less does it provide a plurality of event elements with a single entity. In contrast it states, that tracking the lot is done through ALL suppliers. [0080] is describing a field of Table 1, see [0078]-[0079]. There is no indication in Table 1 of event elements within a single entity. In contrast the Table provides die and wafer quantities, lot numbers, shipping dates, shipping costs, etc. In other words, Yang provides tracking a lot as it moves from supplier to supplier and the cited portions of Yang are not concerned with events within a supplier.

The Examiner’s citation to [0136] and a lot tracking report is likewise off-point. Paragraph [0136] introduces Fig. 14 as one example of a lot tracking report. Fig. 14 is reproduced below for ease of reference.

FIG. 14

Lot Tracking Report

Wednesday, Sept 05, 2001 6:18:49 PM (local time)

Please input a lot number (priority search criteria):

OR select by Device Base Lot Number: Get Report

Dep. Ltr	Lot No.	Part No.	Routing	Start	Stop	Received Date	Received Qty	Start Date	Completed Date	Completed Qty	Ship Date	Ship Qty	Order No.	Yield %	Cost
N1805	N1805		Exp.	Weeks	Days			10/04/2001	12/10/2001	15	12/06/2001	21	200301		31
N1805	N1805		Wafer Sort	Day	Weeks	10/04/2001	01,240	10/04/2001	10/04/2001	64,510	10/06/2001	64,514	000001	93.4	7
N1805	N1805	191016259 256	Assembly	Day	Weeks	10/04/2001	04,514	10/06/2001	10/19/2001	64,393	09/21/2001	64,393	201218	99.8	10
N1805	N1805-1	191016258 256	Final Test	Day	Weeks	10/04/2001	21,362	11/02/2001	11/13/2001	21,360	11/13/2001	21,360	301645	92.3	32
N1805	N1805-2	191016259 256	Final Test	Day	Weeks	10/04/2001	27,829	11/02/2001	11/13/2001	27,828	11/13/2001	27,828	301651	91.1	8
N1805	N1805-3	191016258 256	Final Test	Day	Weeks	10/04/2001	71,144	11/02/2001	11/13/2001	71,143	11/13/2001	71,143	301645		

As is clear from a review of Fig. 14, a plurality of event elements within a single entity are not provided for. The lot tracking report tracks a given lot statistics of received date, start date, completed date, ship date, ship quantity, order number, yield. But there is no indication of event elements within a supplier. As such, the Applicants respectfully request the rejection of claim 21 and the claims that depend therefrom be withdrawn.

In the Advisory Action dated 2/04/2009, the Examiner states that "Yang discloses a supply chain management system for the semiconductor manufacturing industry that includes multiple suppliers, where each supplier is responsible for a specific manufacturing event...Therefore Yang inherently teaches the plurality of 'manufacturing' events required for the manufacturing of a specific product or stage (i.e. wafer)." The Applicants respectfully disagree that this provides a proper inherency argument, or reads upon the claims. Specifically, even assuming it is inherent that different manufacturing event occur at the supplier and that that supplier is responsible for them, it does not provide for the claim language. The claim does not recite merely the existence of event elements but a computer readable medium for assigning event elements at a plurality of suppliers.

With respect to the limitation directed to product quality, the Examiner states that "Yang discloses where different buyers, such as Fabless semiconductor companies, frequently require different information from their suppliers daily or other reports ([0073]). Furthermore, Yang discloses where a buyer relies upon production engineers, production control engineers or other production control personnel to find problems and exceptions that require action or correction during manufacturing and procurement ([0178])." Advisory Action dated 2/4/09. The Applicants respectfully disagree that any of these statements read upon the claim language: "instructions for controlling the product quality, wherein the product quality may be controlled by at least two of the plurality of entities." There is no indication of quality control by at least two of the plurality of entities.

Claim Rejections – 35 USC § 103

Claims 1-5, 6, 7, 11, 12, 14-19 and 23-24 were rejected under 35 USC 103(a) as being unpatentable over Yang in view of Arackaparambil et al. (U.S. Patent Publication No. 2002/0156548, hereinafter referred to as Arackaparambil). Claims 8, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of Luce et al. U.S. 7,356,558 (hereinafter referred to as Luce). Applicant traverses this rejection on the grounds that these references are defective in establishing a *prima facie* case of obviousness.

In *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007), the Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered,

and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *Id.* at 1741 (emphasis added).

As the PTO recognizes in MPEP §2142:

... The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness...

In the present application, a *prima facie* case of obviousness does not exist for the claims for the reasons set forth below.

The Examiner has not shown that all words in the claim have been considered

MPEP 2143.03 states that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." Quoting *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). However, in the present matter, the Examiner has not shown that all words in the claim have been considered.

The Examiner states that "Yang does not explicitly disclose assigning a predetermined event element to the semiconductor-related product at the secondary provided, wherein the predetermined event element includes a product-specific process parameter." Office action, pg. 9. Instead the Examiner asserts that such is provided by Arackaparambil. Even assuming, arguendo, that Arackaparambil provides for assigning predetermined event elements there is no indication that a first computer system associated with a primary provider performs this assignment for events at a secondary provider. Arackaparambil describes a "wafer fabrication or wafer fab" [0004]. However, the Applicants find no indication of multiple providers. Yang, as described above with reference to claim 21, describes a plurality suppliers, but does not indicate any systems or processes occurring within those suppliers. Therefore, for at least this reason, claim 1 and the claims that depend therefrom are allowable.

Claim 6 also includes an element directed to "assigning event elements to the product through the virtual fab, wherein the even elements include a plurality of process steps performed by the secondary provider, wherein the event elements are stored in a memory unit." For at least the same reasons as described above with reference to claim 1, claim 6 and the claims that depend therefrom are allowable.

Dependent Claims

Dependent claims 3-5, 9-12, 14-19, and 22-24 dependent from and further limit claims 1, 6, and 21 and are allowable for at least that reason.

Conclusion

An early formal notice of allowance of claims 1, 3-6, 9-12, 14-19, and 21-24 is requested. The Examiner is invited to telephone the undersigned if further assistance is necessary. Deposit account number 08-1394 can be used for any over payments or under payments.

Respectfully submitted,



Kelly Gehrk Lyle
Reg. No. 62,332

Dated: Feb 17, 09
HAYNES AND BOONE, LLP
IP Section
2323 Victory Avenue, Suite 700
Dallas, Texas 75219
Telephone: 512/867-8528
Facsimile: 214/200-0853
R-221918.1

<p style="text-align: center;">Certificate of Service</p> <p>I hereby certify that this correspondence is being filed with the U.S. Patent and Trademark Office via EFS-Web on <u>Feb 18, 2009</u>.</p> <p style="text-align: center;"><u>Bonnie Boyle</u> Bonnie Boyle</p>
--